Name:

at1113exam: Expand, factor, and solve quadratics (v555)

1. Solve the equation.

$$(9x + 8)(3x - 5) \;=\; 0$$

2. Expand the following expression into standard form.

$$(7x - 9)(2x - 5)$$

3. Expand the following expression into standard form.

$$(5x - 9)(5x + 9)$$

4. Expand the following expression into standard form.

$$(7x + 9)^2$$

5. Solve the equation.

$$10x^2 - 21x + 14 \;=\; 3x^2 - 2x + 4$$

6. Factor the expression.

$$x^2 + x - 42$$

7. Solve the equation with factoring by grouping.

$$12x^2 + 18x - 10x - 15 \;=\; 0$$

8. Factor the expression.

$$49x^2 - 16$$